

Name _____

ECO202: PRINCIPLES OF MACROECONOMICS

SECOND MIDTERM EXAM

April 10, 2008

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FORM 1

Directions

1. Fill in your scantron with your unique id and form number. Doing this properly is worth the equivalent of 1 question.
2. There are 42 multiple choice questions.
3. Your grade is determined entirely upon the answers listed on your scantron. You will not receive your scantron back. Be sure to record your answers on your exam so that you will be able to check your answers once the key is posted.
5. You may use a calculator. Cell phones or other devices that may be used to store text are not allowed.
6. You have until the end of the period to finish the exam. **Additional time may be purchased at a price of 5 percentage points per minute.**
7. Academic dishonesty is a serious offense. In the event I find someone behaving in a dishonest manner, I will ask that the maximum penalty allowed by the university be imposed.

1. A good example of a commodity money popular in U.S. history is:
 - a. a silver dollar
 - b. gold dust
 - c. a dollar bill
 - d. all of the above.

2. Which of the following is true?
 - a. the monetary base = bank reserves + non-bank cash
 - b. bank reserves = bank cash + bank deposits with the Federal Reserve
 - c. M1 = non-bank cash + demand deposits
 - d. all of the above.

3. Which of the following would all lead to a decrease in the money supply?
 - a. an increase in the reserve ratio and Fed sales of government securities.
 - b. an increase in the reserve ratio and Fed purchases of government securities.
 - c. a decrease in the reserve ratio and Fed sales of government securities.
 - d. a decrease in the reserve ratio and Fed purchases of government securities.

4. Over the past several months, the Federal Reserve has been concerned about the economy entering a recession. Many economists believe that an important cause of the economic slowdown is that:
 - a. the Fed has been raising the discount rate over the past several months and it is causing consumers to cut back on spending.
 - b. there has been a collapse in housing prices and a rapid increase in foreclosures on homes that have made banks less willing to lend funds thus contributing to less spending in the economy.
 - c. the Fed has been cutting the discount rate over the past several months and it has led to less consumer spending.
 - d. the dollar has weakened over the past year and this has contributed to less demand for U.S. exports.

5. Suppose that there is a bi-metallic standard. A one dollar gold coin contains 40 grains of gold and a one dollar silver coin contains 160 grains of silver. If the free market price of one grain of gold is three times as high as that for one grain of silver, we should expect that:
 - a. silver coins will circulate as money and gold coins will not circulate.
 - b. gold coins will circulate as money and silver coins will not circulate.
 - c. neither silver nor gold coins will circulate as money.
 - d. both silver and gold coins will circulate as money.

6. According to the equation of exchange, inflation will increase if:
 - a. there is an increase in the growth rate of the money supply.
 - b. there is an increase in the velocity of money.
 - c. there is a decrease in the growth rate of real GDP.
 - d. any of the above would increase inflation.

To answer the next 2 questions, assume that the banking system starts with the following "base case" balance sheet and that (i) the public initially holds \$100 of non-bank cash; (ii) the reserve ratio is 25%; (iii) banks always loan out the maximum amount allowed.

BALANCE SHEET

Reserves	\$2,000	Demand Deposits	\$8,000
Loans	\$6,000		
Govt. bonds	<u>\$5,000</u>	Owner's Equity	<u>5,000</u>
	\$13,000		\$13,000

7. **Start with the base case balance sheet.** If the Fed sells \$100 of government bonds from the banking system and the banking system completely adjusts to this change in their balance sheet, the loans will _____ and M1 will _____.

- increase \$100; increase \$250.
- decrease \$100; decrease \$400.
- increase \$250; increase \$250.
- decrease \$400; decrease \$400.
- none of the above.

8. **Start with the base case balance sheet.** If the Fed reduces the reserve ratio from 25% to 20% and the bank system completely adjusts to this change,

- M1 and loans will increase by \$2,000.
- M1 and loans will decrease by \$2,000
- the monetary base will decrease by \$2,000
- the monetary base will increase by \$2,000

9. **Start with the base case balance sheet.** If the public chooses to deposit \$10 of nonbank cash into demand deposits and the bank system completely adjusts to this change:

- the monetary base will increase by \$10.
- the monetary base will decrease by \$10.
- M1 will not change.
- M1 will increase by \$30.

10. Suppose that the public becomes nervous about the banking system and decides to withdraw some of their demand deposits and hold it as cash. This will:

- a. force banks to reduce loans and drive up interest rates.
- b. lead to a decrease in M1.
- c. not affect the monetary base.
- d. all of the above.

11. As the price of a bond rises, the yield on the bond:

- a. could rise or fall.
- b. falls.
- c. rises.
- d. does not change.

12. Consider a 1 year bond with a coupon rate of 9% and a maturity value of \$1000. If the bond sells for \$1030 today, the yield to maturity on this bond would be _____ (round your answer to the nearest 0.1% -- e.g. 7.2%)

- a. 5.8%
- b. 6.0%
- c. 3.1%
- d. 5.2%

13. Consider a 5 year zero coupon bond with a maturity value of \$1,000 that sells for \$900 today. What is the yield to maturity on this bond?

- a. 11.1%
- b. 9.9%
- c. 6.3%
- d. 2.1%.

14. If stock prices reflect their “fundamental value”, then the recent decline in stock prices months might be explained by:

- a. the Federal Reserve cutting interest rates
- b. a decline in the expected future corporate profits because of concerns about an upcoming recession
- c. the tax rebates that are being promised to taxpayers in summer 2008
- d. any of the above.

15. Suppose that you purchase a call option on IBM for a price of \$5 and an exercise price of \$100 that expires on January 1 of next year. A person would exercise this option only if the price of IBM _____ and would make a net profit (net of the purchase price) only if the price of IBM_____.

- a. falls below \$100; falls below \$95
- b. falls below \$95; falls below \$100
- c. rises above \$100; rises above \$105
- d. rises above \$105; rises above \$100

16. Suppose that you hold a stock and are concerned about the risk that its price could fall dramatically over the next year. One way to insure against this risk is to:

- a. buy put options on the stock
- b. buy call options on the stock
- c. sell put options on the stock
- d. either b or c.

17. Suppose that today you buy 1000 bushels of corn in the January 2009 futures market at a price of \$4. Further, suppose that in January 2009 the actual price of a bushel of corn is \$3. As a result of this transaction in the futures market, you will:

- a. profit by \$4000
- b. profit by \$1000
- c. lose \$1000
- d. lose \$3000.

18. If a stock has a relatively high price-earnings ratio, this suggests that:

- a. it will perform worse than average when the stock market worsens.
- b. it will perform better than average when the stock market worsens.
- c. its earnings in the future are expected to grow at an above average rate.
- d. its earnings in the future are expected to grow at a below average rate.

19. If the efficient markets theory holds and there is an announcement in the newspaper that Microsoft profits will be much higher in the future than analysts previously expected:

- a. you would be wise to buy Microsoft after reading the article because its price will increase in the future.
- b. it is too late to make any profit off of this news because the price of Microsoft stock will immediately adjust to reflect this news.
- c. you would be wise to sell Microsoft after reading the article because its price will decrease in the future
- d. you cannot make any profit off of this news because Microsoft's future earnings will not have any impact on its stock price.

To answer the next 4 questions, refer to the diagram below which shows the number of Korean Won per dollar over the past 5 years.



20. Over the past 5 years, the dollar has (appreciated, depreciated) relative to the Korean Won.
- appreciated.
 - depreciated.
21. Over the past 3 months, the dollar has (appreciated, depreciated) relative to the Korean Won and this should (increase, decrease) the cost of U.S. imports from Korea.
- appreciated; increase.
 - appreciated; decrease.
 - depreciated; increase.
 - depreciated; decrease.
22. As seen in the above diagram, the number of won per dollar dropped from approximately 1000 to 925 (a drop of 7.5%) between January of 2006 and January of 2007. If, over this period, you held a bond in Korea that paid a 6% return in Korean won, after converting back into dollars at the end of the period you would earn a return of:
- 1.5%
 - 6%
 - 13.5%
 - 1.5%
23. As seen in the above diagram, the number of won per dollar dropped from approximately 1000 to 925 (a drop of 7.5%) between January of 2006 and January of 2007. If interest rate parity holds and bonds in Korea paid 6 percent over that time period, interest rates in the U.S. over the same period would have to be _____.
- 1.5%
 - 6%
 - 9.5%
 - none of the above.

24. If the yield curve steepens, it is an indication that:
- interest rates on long term government bonds have risen relative to short term bonds.
 - interest rates on long term government bonds have fallen relative to short term bonds.
 - interest rates on both short term and long term government bonds have increased.
 - interest rates on both short term and long term government bonds have decreased.

25. Based upon the supply/demand model for the dollar in the foreign currency market, which of the following would cause the dollar to appreciate?
- an increase in the U.S. inflation relative to the rest of the world.
 - an increase in the expected return on U.S. assets relative to the returns available in the rest of the world.
 - an increase in U.S. demand for imports from the rest of the world.
 - all of the above.

26. Suppose that there is an increase in foreign demand for U.S. exports. In the supply/demand model for the dollar in the foreign currency market, this would cause:
- an increase in the supply of dollars and a depreciation of the dollar.
 - an increase in the supply of dollars and an appreciation of the dollar.
 - an increase in the demand for dollars and an appreciation of the dollar.
 - both b and c.

27. Suppose that the rest of the world becomes nervous about investment returns in the U.S. This would likely lead to:
- a decrease in the demand for dollars and depreciation of the dollar. The depreciation of the dollar would help stimulate U.S. exports and reduce U.S. imports.
 - a decrease in the demand for dollars and depreciation of the dollar. The depreciation of the dollar would help stimulate U.S. imports and reduce U.S. exports.
 - a decrease in the supply of dollars and appreciation of the dollar. The depreciation of the dollar would help stimulate U.S. exports and reduce U.S. imports.
 - a decrease in the supply of dollars and appreciation of the dollar. The depreciation of the dollar would help stimulate U.S. imports and reduce U.S. exports.

28. As of 4/4/2008, the exchange rate between the Indian rupee and the Swedish krona was 6.71 rupees per krona. If purchasing power parity holds and the price of gold is 40,000 rupee in India, what should the price of gold be in Sweden?

- a. 5961 krona
- b. 268,400 krona.
- c. 6.71 krona.
- d. .149 krona

29. According to the theory of purchasing power parity, the number of pounds per dollar will fall if

- a. U.S. interest rates rise or British interest rates fall
- b. U.S. inflation rises or British inflation falls
- c. U.S. interest rates fall or British interest rates rise.
- d. U.S. inflation falls or British inflation rises

30. Which of the following would lead to a larger current account surplus in the U.S.?

- a. an increase in U.S. imports
- b. a decrease in U.S. exports
- c. an increase in U.S. interest income from foreign countries.
- d. all of the above.

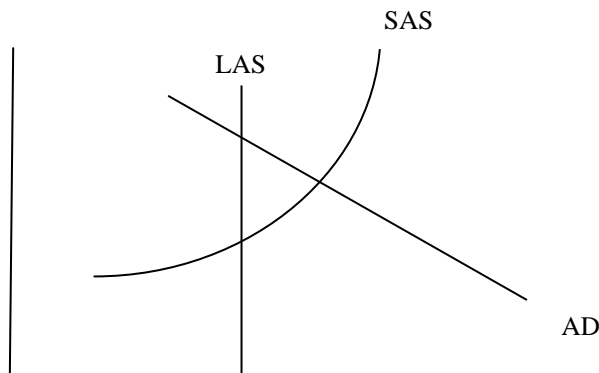
31. Which of the following would all lead to a larger capital account deficit in the U.S.?

- a. decreased purchases of foreign bonds by U.S. citizens, or increased purchases of U.S. bonds by foreign citizens.
- b. decreased purchases of foreign bonds by U.S. citizens, or decreased purchases of U.S. bonds by foreign citizens.
- c. increased purchases of foreign bonds by U.S. citizens, or increased purchases of U.S. bonds by foreign citizens.
- d. increased purchases of foreign bonds by U.S. citizens, or decreased purchases of U.S. bonds by foreign citizens.

32. Assuming that the official settlements account has a zero balance, if the U.S. is a net borrower from the rest of the world this year, it will have

- a. a current account surplus
- b. a capital account surplus
- c. a capital account deficit
- d. both a and c.

Consider the diagram below to answer the next 3 questions:



33. At the short run equilibrium described in the above diagram, the economy is producing (above, below) potential GDP and the unemployment rate is (above, below) the natural rate.

- a. above; above. b. above; below. c. below; above. d. below; below

34. At the short run equilibrium described in the above diagram, there is (upward, downward) pressure on real wages because the unemployment rate is (above, below) the natural rate.

- a. upward; above.
b. upward; below.
c. downward; above.
d. downward; below

35. Starting at the short run equilibrium described in the above diagram, as the economy moves to the long run equilibrium, it should experience:

- a. increases in real wages and prices and decreases in unemployment.
b. decreases in real wages, increases in prices and decreases in unemployment.
c. increases in real wages and prices and increases in unemployment.
d. decreases in real wages, increases in prices and increases in unemployment.

36. When the price level rises, AD falls

- a. because the real value of money decreases
b. because imports will decrease when the price level rises
c. because interest rates will fall and reduce consumption in the current period.
d. all of the above.

37. Suppose the economy is in a LR equilibrium and there is a sudden decrease in income in the rest of the world. In the short run, this will cause:
- a decrease in AD, lower prices and an increase in unemployment in the U.S.
 - a decrease in AD, higher prices and an increase in unemployment in the U.S.
 - an increase in AD, higher prices and an increase in unemployment in the U.S.
 - none of the above.
38. Suppose the economy is in a LR equilibrium and there is a sudden decrease in income in the rest of the world. In the long run, this will cause:
- a decrease in AD, lower prices and an increase in unemployment in the U.S.
 - a decrease in AD, lower prices and no change in unemployment in the U.S.
 - an increase in AD, higher prices and an increase in unemployment in the U.S.
 - none of the above.
39. An increase in aggregate demand (AD) would be caused by _____ taxes, _____ government spending, or an expectation of _____ future income.
- higher taxes; decreased; greater.
 - lower taxes; increased; greater.
 - lower taxes; decreased; lower.
 - none of the above.
40. Which of the following would increase long run aggregate supply?
- increased immigration.
 - a tax cut on worker wages.
 - increased capital accumulation.
 - all of the above.
41. Suppose that the dollar weakens in foreign currency markets. If the economy started at a long run equilibrium, the short run effect of the weaker dollar would be:
- higher prices, higher real wages, and less unemployment in the U.S.
 - higher prices, lower real wages, and less unemployment in the U.S.
 - lower prices, lower real wages, and more unemployment in the U.S.
 - lower prices, higher real wages, and less unemployment in the U.S.
42. Economic growth
- occurs when LAS shifts right.
 - will lead to lower prices unless AD shifts to the right faster than LAS shifts right.
 - results if labor supply or demand increases, or if the production function shifts upward.
 - all of the above.

ANSWERS

- | | |
|----|---|
| 1 | B |
| 2 | D |
| 3 | A |
| 4 | B |
| 5 | B |
| 6 | D |
| 7 | D |
| 8 | A |
| 9 | D |
| 10 | D |
| 11 | B |
| 12 | A |
| 13 | D |
| 14 | B |
| 15 | C |
| 16 | A |
| 17 | C |
| 18 | C |
| 19 | B |
| 20 | B |
| 21 | B |
| 22 | C |
| 23 | D |
| 24 | A |
| 25 | B |
| 26 | C |
| 27 | A |
| 28 | A |
| 29 | B |
| 30 | C |
| 31 | D |
| 32 | B |
| 33 | B |
| 34 | B |
| 35 | C |
| 36 | A |
| 37 | A |
| 38 | B |
| 39 | B |
| 40 | D |
| 41 | B |
| 42 | D |

